

STATEWIDE EFFORT TO IMPROVE HOSPITAL PATIENT SATISFACTION RATINGS

2004



Health Quality Performance Measurement

Rhode Island Department of Health Summary Report

Patient Satisfaction Public Report Follow-Up Investigation

Since the passage of legislation (Chapter 23-17.17), an act relating to Health and Safety establishing the Health Care Quality Performance Measurement and Reporting Program in 1998, public reports of hospital specific clinical care and patient satisfaction measures, nursing home specific clinical quality of care have been released to the public. These reports represent the first time information on the quality of care was made available to the public by facility in Rhode Island.

The intent of the law (23-17.14) was to produce accountability and provide benchmarks of quality care in the state's health care delivery system. Lieutenant Governor Charles Fogarty, the author of the legislation, developed support for the Performance Measurement Program by including all of the key stakeholders in principal points to be covered by the law. The stakeholders include provider groups (hospitals, nursing homes, home health agencies), physician groups, nurses, and businesses. The Rhode Island Department of Health (HEALTH) was designated as the agency to implement the legislation. The Director of HEALTH, Patricia Nolan MD, MPH serves as chair of the Steering Committee. This committee was established as part of the legislation to oversee its implementation. The Hospital Measures Subcommittee was formed to provide the technical expertise needed to comply with the law to incorporate a "standardized data set of clinical performance measures, risk-adjusted for patient variables, and comparable, statistically valid patient satisfaction measures" for public reporting hospital performance. The Hospital Measures Subcommittee members are nurses, physicians from the individual hospitals, the Hospital Association of Rhode Island and Qualidigm (the quality improvement organization and the program subcontractor).

The focus of this report reflects the activities of the Hospital Measures Committee and their work identifying the challenges and opportunities to improve the hospital patient satisfaction ratings. Two areas explored were the feasibility of reporting patient satisfaction by minority status and the causes of the low ratings on satisfaction with the admission process reported for many hospitals.

This report is intended as a summary of analyses that were undertaken after the release of the second hospital patient satisfaction report to attempt to improve the data quality of the reporting of patients' minority status, and to uncover the root cause of Rhode Island's trouble with admission issues. Based on these analyses, best practices among the hospitals were identified and described.

1. Minority Reporting

The goal was to determine the feasibility of reporting patient satisfaction by minority status in order to investigate whether patients of minority background view care differently than non-minority patients. First, we needed to decide how to identify and define individuals as being of minority status. Second, we needed to see if there were enough surveys returned by patients of minority status to allow us to conduct our research. Third, we needed to identify the types of patients on whom to focus (i.e., all patients, medical/surgical patients, or obstetrics patients). Finally, we investigated whether the evaluations of care reported by patients of minority status were different from the evaluations reported by non-minority patients.

We found that patients of minority status had a significantly higher rating of the items relating to room and meals than their non-minority counterparts. The same trend was seen between Hispanic and non-Hispanic patients. There were no significant differences found between African American and non-African American patients.

See page 3 for the full report.

2. Admission Results

Data Analyses

The first statewide hospital satisfaction report, “A Report of Patient Satisfaction with Hospital Care in Rhode Island,” produced in November 2001, revealed that hospitals in Rhode Island were rated about the same as hospitals in the comparison group for nursing and medical care but needed improvement in the admission process. Subsequently, the second hospital patient satisfaction report, “Patient Satisfaction with Hospital Care in Rhode Island” produced in October 2003, revealed that the admission process was the domain of care where seven of the thirteen hospitals scored below the comparison group in patient experiences. Almost immediately after the second report was released, the Hospital Measures Subcommittee convened to explore the reasons for the low satisfaction ratings and identify possible options for improving the ratings for the third round of public reporting.

We found that patients in Rhode Island who were admitted through the Emergency Department had significantly lower ratings of their inpatient experience. It was also discovered that Rhode Island has a larger percent of admissions coming through the Emergency Department than the nation and the surrounding states with a substantially higher percentage of Medicaid patients being admitted through the ED than normative data would suggest. Although RI has a larger proportion of ED admissions than is seen in the national database as a whole, the scores for both ED admit patients and non-ED admit patients were both below what would be expected based upon national and regional norms.

Normative data also revealed that the percent of admissions admitted through the Emergency Department is relatively constant throughout the year for Press Ganey clients as a whole. However, for Rhode Island, there were spikes of increases in Rhode Island ED admissions during the months of public report data collection. Further drill-down revealed that the largest disparity in scores between ED and non-ED admissions was for the item ‘Speed of the admission process’.

See page 12 for the full report.

3. Best Practices

Best practices were related to the way hospitals identified the race of the patient. Although the previous analyses did reveal some aspects of patterns and trends in the admissions scores, these data did not lead to a definitive answer as to what issues should be addressed in the admission process or Emergency Department environment in Rhode Island. As a result, we looked to best practices nationwide and within Rhode Island to gather information about how to improve patient care in these areas. Press Ganey provided documentation of best practices for each of the admission questions on the survey. These best practices were the result of extensive literature review and information gathered from clients regarding potential methods to improve care in the admission process. Additionally, a collaborative process was created for Rhode Island hospitals to share their best practices with each other. These submissions are provided as an appendix to this document and can be found on page 18.

Research Issue 1: Are there differences in the way that minority and non-minority patients evaluate their care?

A. Definition of Minority

1. Source of Race/Ethnicity Variable

The first step of this process was to create a consistent means to identify patients as being of minority status. There were two sources of information about patient race and ethnicity. This information came from both the hospital uploading patient names for mailing and from the patient self-report by answering questions about race and ethnicity on the survey.

Hospital Uploaded Information for Race and Ethnicity

Hospitals uploaded a code in the patient record sent to Press Ganey indicating each patient's race/ethnicity and the patient's primary language as assessed during the admission process. This code could then be referenced for all patients, regardless of whether or not they chose to return the survey.

The hospitals uploaded each patient's race as one of the following:

- American Indian
- Asian
- Black
- White
- Other
- Unknown
- Hispanic White
- Hispanic Black
- Hispanic

While all hospitals reported race of the patient, they differed as to how they defined a patient as Hispanic. Some hospitals classified patients as Hispanic White and Hispanic Black, whereas others defined all Hispanic patients using the code for Hispanic.

Patient Self-Report of Race and Ethnicity

On the survey, patients were first asked "Are you Hispanic or Latino?" with "Yes" and "No" as response options. Patients were then asked "What is your race?" and were given the following choices:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

2. Accuracy of Hospital Uploaded Information

The accuracy of hospital uploads was assessed by comparing the race code uploaded by the hospital and the patient's report of race on the survey. All the hospitals uploaded a race variable; however, there were inconsistent results regarding the accuracy of hospital uploads. In comparing the race provided by the hospitals to the race noted by the patients, we found the following:

- Five hospitals did not upload any missing race codes and were reasonably accurate (4 had less than 5% error and the other had less than 10% error)
- One hospital had no Missing race fields but had an error rate of 26.2%, due primarily to uploading a race code of Unknown
- One hospital had one record missing the race field (0.1% of total) and less than 6% error

- One hospital had some missing race fields (6.6% of uploads) and had less than 2% error.
- Three hospitals had reasonable error rates but had a lot of missing race fields ranging from 37.9 to 40.2 percent of the total number of patient records uploaded

Memorial Hospital of Rhode Island, one of the hospitals with a low number of missing uploads and good accuracy, shared the process that was in place during the public report data collection period as a best practice for other facilities. They showed patients laminated cards at admission with the following questions:

A. Please tell me the number or letter that best matches your race:

1. White
2. Black or African American
3. Asian
4. American Indian or Alaska Native
5. Native Hawaiian or Pacific Islander

Mixed races:

- f. White and Black
- g. White and Asia
- h. White and American Indian or Alaska Native
- i. White and Native Hawaiian or Pacific Islander
- j. Black and Asian
- k. Black and American Indian or Alaska Native
- l. Black and Native Hawaiian or Pacific Islander
- m. Asian and American Indian or Alaska Native
- n. Asian and Native Hawaiian or Pacific Islander
- o. American Indian or Alaska Native and Native Hawaiian or Pacific Islander
- p. All other

B. Are you Hispanic/Latino? Yes/No

The responses were recorded by admissions personnel and then uploaded to Press Ganey for the survey. For other best practices and current initiatives submitted by the hospitals in Rhode Island see the appendix on page 18 of this report.

3. Accuracy of Patient Self-Reports

Because patients are in no way obligated to answer any of the questions on the survey, there are many instances where the race question was not answered resulting in missing data for that variable on the patient's survey. There were 305 returned surveys without a response to the question 'Are you Hispanic or Latino?' and 289 patients chose not to answer the question 'What is your race?'.

In checking the accuracy of patient self-reports one inconsistency became apparent. There were 88 patients who marked the Native American survey option on the returned survey – far more than would have been expected. Looking at the race variable uploaded by the hospitals for these patients we saw that only 3 were pre-identified as being American Indian (see Table 1).

Table 1: Hospital Uploaded Race Codes for Patients Reporting They Were American Indian or Alaska Native

Uploaded Race	Frequency	Percent
American Indian	3	3.4
Black	4	4.5
White	59	67.0
Unknown	1	1.1
Hispanic White	1	1.1
Hispanic	2	2.3
Missing	18	20.5
Total	88	100.0

Because it was unexpected that so many patients would identify themselves as American Indian or Alaska Native, it was decided to further investigate these survey responses. First, we looked at the distribution of demographics of these patients: In which city do they live? Which hospital did they visit? What is the distribution of their age and sex? These figures were compared to other sources to see if this sample was representative of the population of Native Americans who live in Rhode Island. We found that the characteristics of these patients did not match what would be expected for this population segment.

Our next step was to view the actual returned survey images to see if there was a distinguishable pattern as to patients responding as Native Americans. In doing so, it was discovered that patients were using the first listed response, “American Indian or Alaska Native”, as a way of indicating that they were American citizens. Respondents would check the box and write in “I was born here” or “from Rhode Island”. The consensus of the group was to consider the reported American Indian race as Missing unless the patient’s uploaded race was also Native American. Below is a table that shows the frequency of patient reported race after the checks were performed on those who identified themselves as Native American.

Table 2: Adjusted Patient Report of Race

Patient Reported Race	Frequency	Percent
American Indian/Alaska Native	3	0.1
Asian	29	0.6
Black/African American	92	1.8
Hawaiian/Pacific Islander	7	0.1
White	4632	91.7
Missing	289	5.7
Total	5052	100.0

4. Final Definition of Minority

Though the race uploads were reasonably accurate for most facilities, it was decided that it was best to trust the patient's own assessment of his or her race if it differed from the upload. In cases where the patient chose not to report race, it was decided to leave that variable as Missing rather than to substitute the uploaded race assignment from the hospital. An exception to this rule was made for patients who identified themselves as American Indian or Alaska Native, as discussed above.

Patients were considered to be of minority status if they self-reported that they were Hispanic or non-White on the survey. Table 3, below, shows the breakdown of how the status of minority or non-minority was assigned.

Table 3: Assignment of Minority Status

Patient Reported Hispanic	Patient Reported Race	Categorized as Minority?
Yes	American Indian or Alaska Native	Yes
Yes	Asian	Yes
Yes	Black or African American	Yes
Yes	Native Hawaiian or Other Pacific Islander	Yes
Yes	White	Yes
Yes	Missing	Yes
No	American Indian or Alaska Native	Yes *
No	Asian	Yes
No	Black or African American	Yes
No	Native Hawaiian or Other Pacific Islander	Yes
No	White	No
No	Missing	Missing
Missing	American Indian or Alaska Native	Yes *
Missing	Asian	Yes
Missing	Black or African American	Yes
Missing	Native Hawaiian or Other Pacific Islander	Yes
Missing	White	Missing
Missing	Missing	Missing

* If uploaded race was also American Indian, otherwise Patient Reported Race and Minority Status were Missing

B. Results of Minority Analyses

1. Minority Response Rates and Sample Sizes

While self-reported data was used in the previous analyses, only data as uploaded by the hospitals can be considered when doing an analysis of response rates since patient reported data is not available for surveys that were not returned. The response rates were an important consideration in determining the number of returns that would be available for analysis and if the sample would be large enough.

a. Spanish Language Surveys

The uploaded code for the patient's primary language determined whether the patient was mailed a Spanish or English survey. In addition, instructions and a telephone number appeared on the cover letter directing the patient what to do if they received a survey in English but preferred Spanish (or vice versa). In 2003 there were no such call-in requests.

The uploaded race/ethnicity codes of the patients who were mailed and returned a Spanish language survey were distributed over all the possible categories as seen in Table 4.

Table 4: Uploaded Race of Patients Receiving a Spanish Language Survey

Uploaded Race	Number Mailed	Number Returned
Asian	1	0
Black	8	1
White	67	12
Other	89	9
Unknown	10	1
Hispanic White	2	0
Hispanic Black	1	0
Hispanic	137	20
Missing	83	8
Total	398	51

Of the 51 patients who returned a Spanish language survey, 49 indicated that they were Hispanic or Latino on their returned survey.

b. Response Rates by Language of the Survey

- In 2003 there were 398 Spanish language surveys mailed, 32 undeliverable and 51 returned for a response rate of 13.9%.
- There were 16,288 English language surveys mailed, 321 undeliverable and 5,001 returned for a response rate of 31.3%.

c. Response Rates for Patients Pre-Identified by the Hospital as Hispanic

- There were 49 English language surveys returned by patients pre-identified as Hispanic for a response rate of 15.8%.
- Patients pre-identified as Hispanic returned 20 Spanish language surveys for a response rate of 15.4%.
- The overall response rate for the 461 patients pre-identified as Hispanic was 15.7%.
- There were 4,153 returns from patients not pre-identified as Hispanic for a response rate of 31.1%

d. Response Rates for Patients Pre-Identified by the Hospital as African American

- There were 66 surveys returned by patients pre-identified as African American for a response rate of 13.1%.
- The response rate for non-African American patients was 31.3% (13,550 mailed, 4,156 returned and 271 undeliverable).

e. Minority Sample Sizes

The next step in trying to pinpoint differences between subsets of the patient population was to look at the number of returns for each minority group to ensure that we had a stable sample in each category. It was decided to investigate only differences for the medical/surgical population, as the OB population generally had too few respondents to split into smaller sub-groups for analysis. Table 5 lists the comparisons investigated and the number of returns for each.

Table 5: Number of Medical/Surgical Returns for Racial/Ethnic Categories of Patients

Category	Number of Returns from Medical/Surgical Patients
Minority	240
Non-Minority	4108
Hispanic	113
Non-Hispanic	4253
African American	88
Non-African American	4404

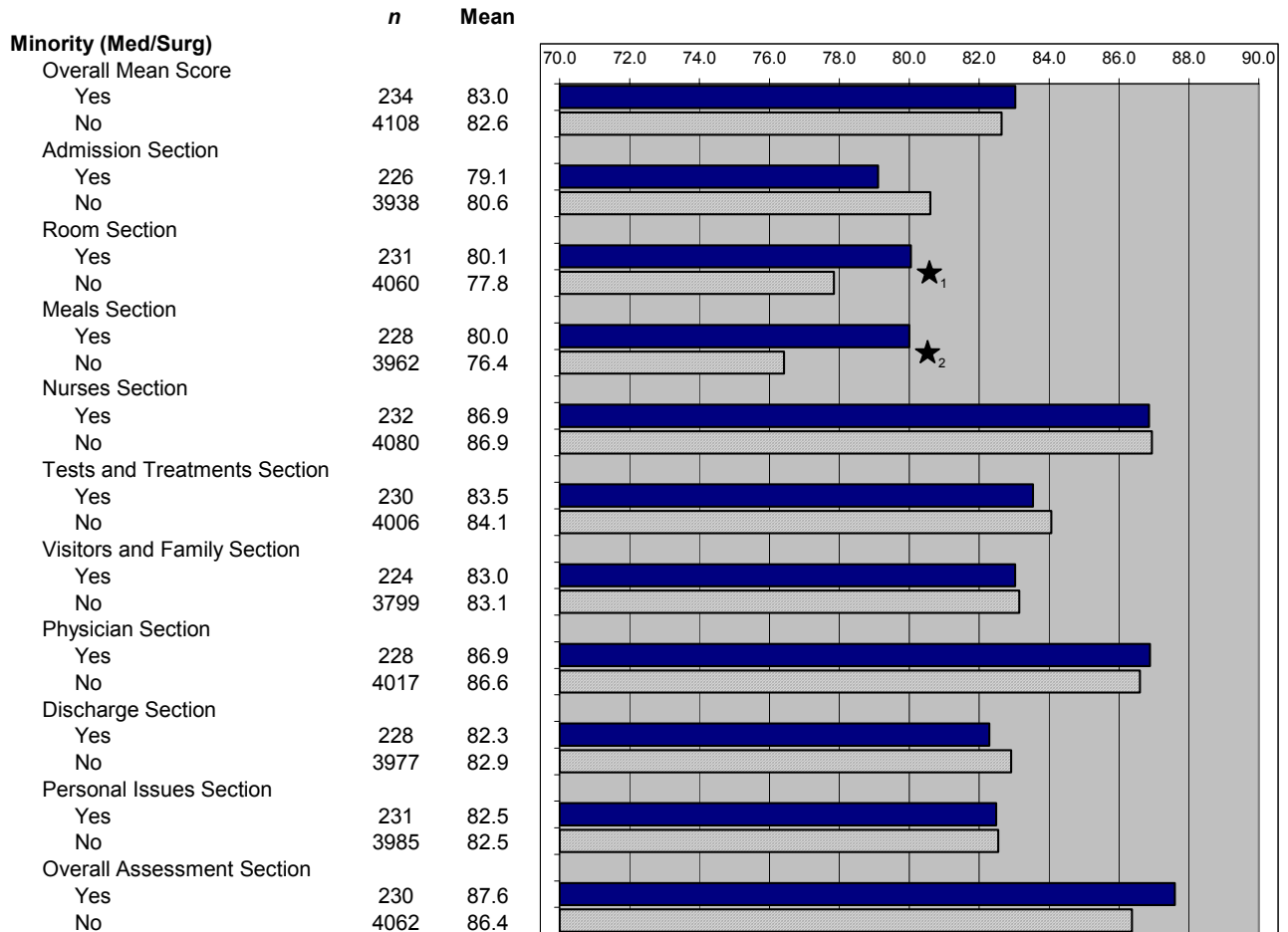
2. How do perceptions of care differ for minority and non-minority patients?

Once it was established that there were enough survey returns in each of the categories for Medical/Surgical patients, the mean scores for each sub-group were graphed. Additionally t-tests, a method for identifying statistically significant differences, were performed. Table 6 (see next page) shows the differences between Minority and non-Minority patients.

a. Differences Between Minority* and Non-Minority Patients

Table 6 and *t*-test analyses indicate that patients in the minority category reported significantly higher evaluations of Room and Meals items on the patient satisfaction survey.

Table 6: Patient Evaluations for Minority (blue bar) vs. Non-Minority (red bar) Patients

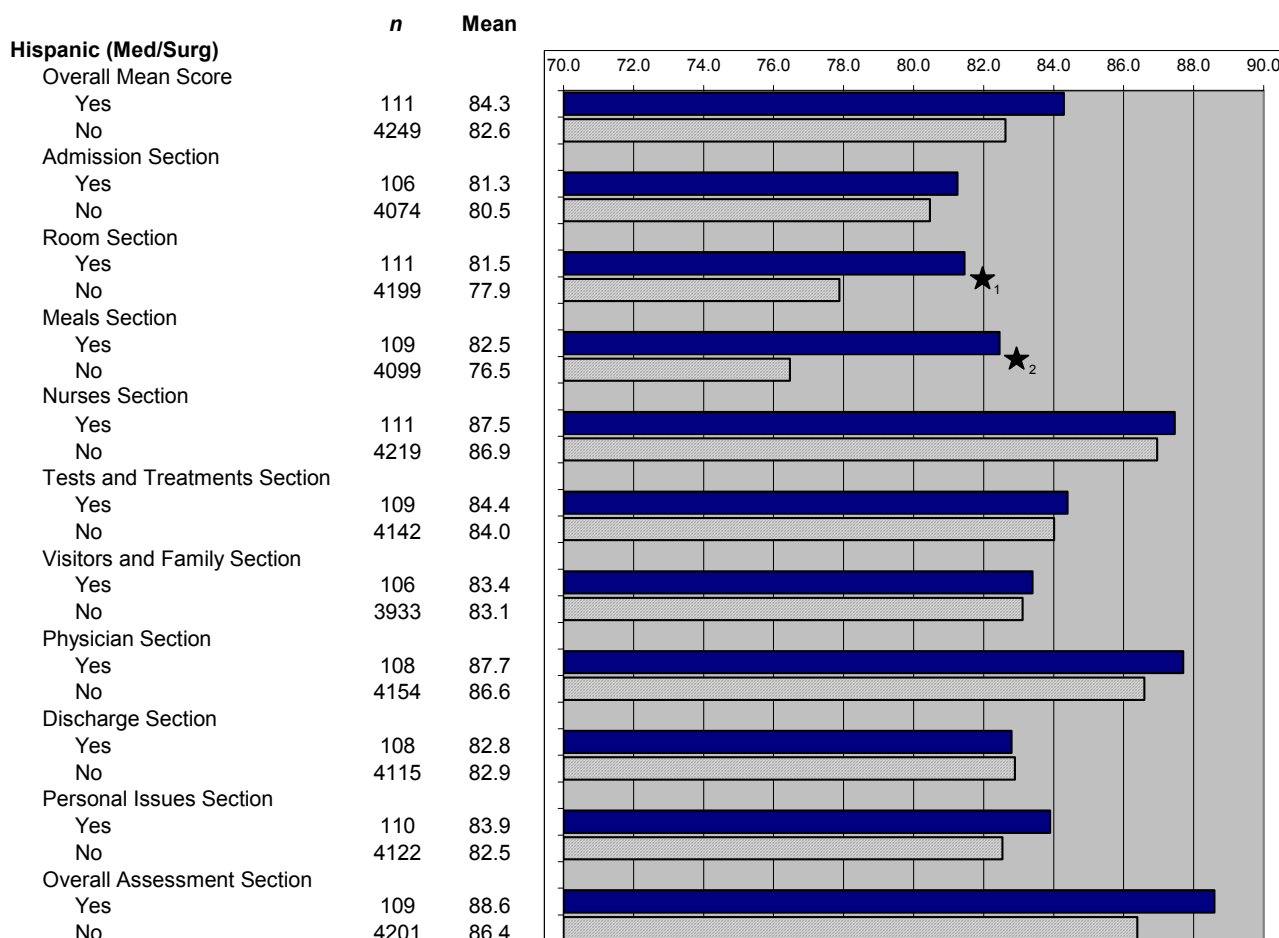


* **Minority:** Patient checked Hispanic or non-White on the survey. Native American responses were compared to the category uploaded by the hospital and only if categories matched were they included in the minority group.

b. Differences Between Hispanic* and Non-Hispanic Patients

Table 7 indicates that Hispanic patients reported significantly higher evaluations of their Room and Meals items on the patient satisfaction survey. In general, Hispanic patients reported higher evaluations for most areas of care. However, only the Room and Meals items were statistically significantly higher.

Table 7: Patient Evaluations for Hispanic (blue bar) vs. Non-Hispanic Patients (red bar)

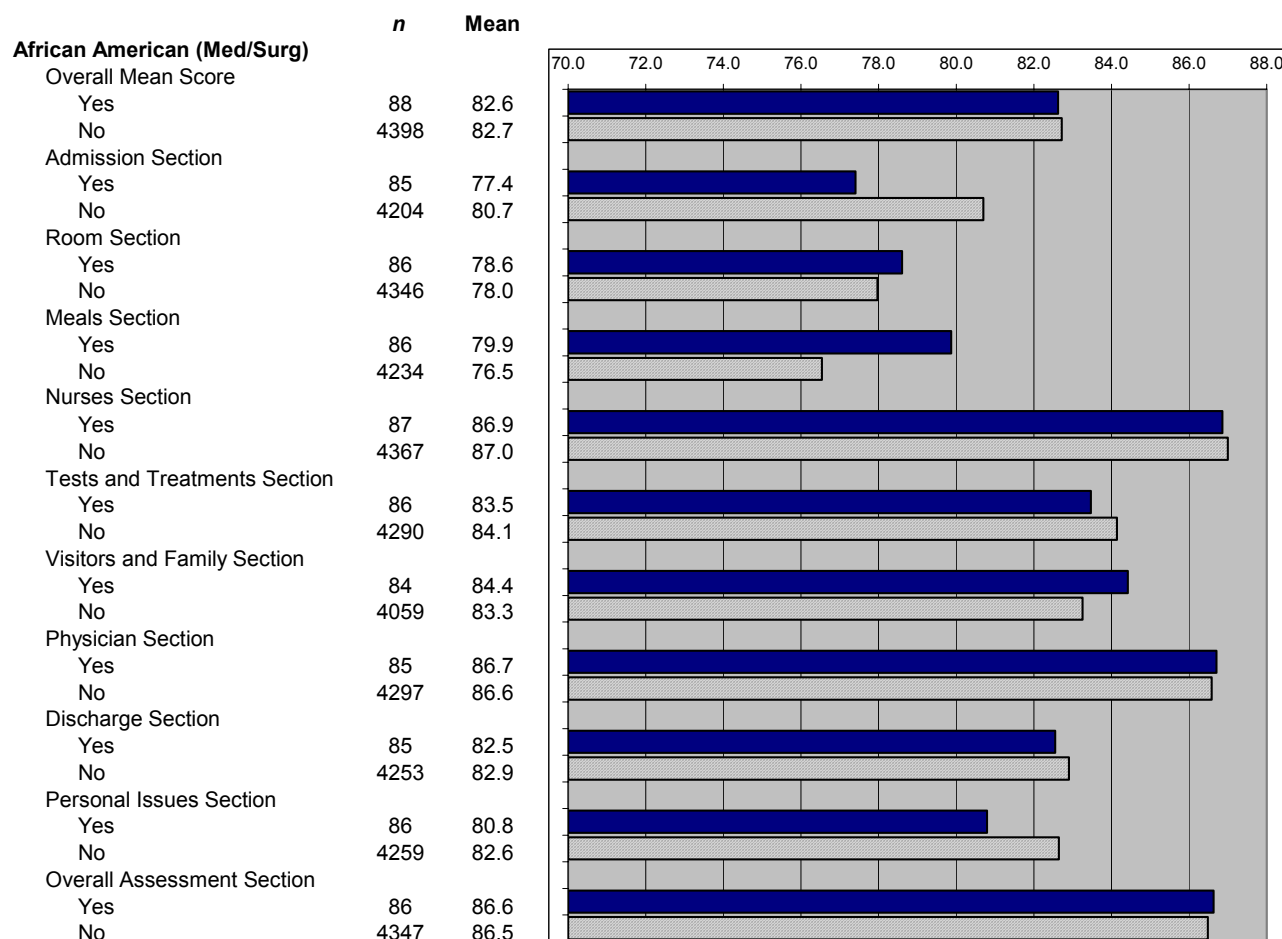


* **Hispanic:** Patient checked Hispanic or Latino on the survey. Survey images were reviewed in order to verify responses.

c. Differences Between African American* and Non-African American Patients

As seen in Table 8, unlike the other comparisons, there are no significant differences between African Americans and non-African Americans.

Table 8: Patient Evaluations for African American (blue bar) vs. Non-African American Patients (red bar)



* **African American:** Patient checked Black/African American on the survey

Research Issue 2: Understanding Rhode Island Hospitals' Admission Scores

A. General Results from the 2003 Public Report

The public report revealed that 4 of the 11 hospitals in Rhode Island score significantly lower on admission issues than other hospitals in the country (one diamond). Additionally, none of the Rhode Island hospitals had admission scores that were significantly higher than the national average (three diamonds). It was decided that an attempt should be made to determine the root cause of these issues and determine steps that could be taken to improve patient perceptions of admissions in Rhode Island.

B. Drill Down to Determine What Might Be Behind the Low Evaluations of Admissions

Through a series of analyses, we worked through the possible root causes of the patient perception of the admission process:

1. ED Admit Proportions and Mean Scores

It is known from national comparative data that patients admitted through the Emergency Department on average report lower evaluations of their admission process than patients who are not admitted through the Emergency Department. We investigated the possibility that RI hospitals might have a larger than expected proportion of Emergency Department admissions that could lower the expected score for the admissions issues.

Table 9 compares the proportions and mean scores for patients admitted through the Emergency Department versus those not admitted through the Emergency Department. These proportions and mean score are provided first at the National Level and then for the states within AHA region 1 (i.e., the New England states). Additionally, the difference in evaluation of the admission process between ED admit and Non-ED admit is shown. Finally the average score for admissions for all patients in each group (e.g., National, AHA Region 1) is provided.

Table 9: Admission Section – All Patients

	ED	Non-ED	Difference	Total
National	55%	45%		
Mean	81.3	87.2	-5.9	84.0
AHA Region 1	59%	41%		
Mean	81.9	89.4	-7.5	84.4
All RI	60%	40%		
Mean	76.8	87.5	-10.8	81.2
All RI w/o W&I	63%	37%		
Mean	77.8	88.1	-10.3	81.0

It was noted during these analyses that a higher percentage of Rhode Island admissions come through the emergency department when compared with the rest of the country or AHA Region 1. It was also found that Women and Infants hospital had a very low percent of Emergency Department admissions. It was decided to look both at all patients in Rhode Island and also all patients excluding those who visited Women & Infants (see lower half of Table 9).

The admission scores for RI patients was noted as being lower than the national or regional averages for both the ED admit patients and the Non-ED admit patients. Further the difference in score between ED admit and Non-ED admit patients was greater for the Rhode Island.

Looking at Med/Surg and OB patients separately in Tables 10 and 11 (on next page), respectively, we see that the trend of a larger than expected percentage of ED admit patients continues in the Med/Surg patient population. For the OB population, the ED admission proportion for RI patients excluding Women and Infants (22%) hospital is actually lower than the national average (25%).

Additionally, the pattern of mean scores is similarly low for the Rhode Island patients as compared to the National and Regional averages for both Med/Surg and OB patients. Again we find that the Rhode Island patients also show a greater discrepancy in score when comparing ED admit to Non-ED admit patients.

Table 10: Admission Section – Med/Surg Patients

	ED	Non-ED	Difference	Total
National	59%	41%		
Mean	80.7	86.9	-6.2	83.3
AHA Region 1	63%	37%		
Mean	81.4	88.9	-7.5	83.7
All RI	63%	37%		
Mean	76.5	87.1	-10.6	80.6
All RI w/o W&I	68%	32%		
Mean	77.6	87.5	-9.9	80.4

Table 11: Admission Section – OB Patients

	ED	Non-ED	Difference	Total
National	25%	75%		
Mean	87.2	88.8	-1.6	88.0
AHA Region 1	21%	79%		
Mean	89.4	90.8	-1.4	88.7
All RI	27%	73%		
Mean	82.8	90.0	-7.1	87.8
All RI w/o W&I	22%	78%		
Mean	87.2	89.2	-2.0	87.8

2. Effects of Seasonality (RI vs. National)

Analyses were conducted to understand if aspects of seasonality either within Rhode Island or in the National database might contribute to Rhode Island hospitals' relatively poor standing for admission issues. It was found that the patterns of scores for ED and Non-ED admissions were very stable across the months of the year at the national level. However, Rhode Island patterns showed dips in January/February as well as July. Thus, the data used in the public report reflect a time when Rhode Island seems to be particularly challenged in the Admission area (ED admits in particular).

The question was also asked if AHA Region 1 is subject to the same types of seasonal fluctuations as Rhode Island. Except for a spike in ED admission in December (52.9%), AHA Region 1 holds steady at around 47.6% of admissions coming from the Emergency Department. As discussed above, the percent of admissions coming through the Emergency Department is much higher in Rhode Island and has more fluctuation from month to month.

3. Admissions by Payor and Patient Type

It was hypothesized that patients who have a particular type of insurance may be more or less likely to be admitted via the Emergency Department and may have different expectations of care that could lead to different evaluations of the care received.

Table 12 (on next page) shows the difference in proportion and score for ED admit and non-ED admit patients broken out by payor type. These data are provided at the National level for comparison to the Rhode Island population.

Table 12: Comparison of Percent ER Admissions and Mean Score

	National			Rhode Island		
	Percent ER Admissions	Admission Section ER Admit	Admission Section Non-ER Admit	Percent ER Admissions	Admission Section ER Admit	Admission Section Non-ER Admit
Med/Surg						
Private Insurance	48.2%	79.7	86.6	-	-	-
Medicare	58.9%	80.6	86.8	72.6%	77.4	88.4
Managed Medicare	-	-	-	67.7%	77.2	87.5
Medicaid	65.4%	76.5	84.7	80.3%	73.3	82.4
Managed Medicaid	-	-	-	54.0%	77.0	85.3
Other Government	-	-	-	90.2%	73.0	72.2
Workers Compensation	45.7%	79.6	86.3	41.4%	65.3	83.3
Self-pay	70.2%	78.6	86.0	75.0%	80.3	85.9
HMO	56.0%	81.0	85.5	62.9%	74.8	85.9
Commercial	-	-	-	49.2%	75.7	86.1
CHAMPUS	44.4%	85.9	96.7	40.0%	82.8	90.6
Blue Cross	30.5%	66.2	89.7	49.7%	75.9	87.7
OB						
Private Insurance	18.1%	87.3	89.0	-	-	-
Medicare	33.9%	83.4	86.3	50.0%	75.0	100.0
Managed Medicare	-	-	-	0.0%	-	66.7
Medicaid	29.9%	85.5	87.1	33.3%	66.7	68.8
Managed Medicaid	-	-	-	46.8%	83.7	92.8
Workers Compensation	26.9%	87.6	86.3	-	-	-
Self-Pay	22.7%	86.0	87.1	66.7%	79.2	75.0
HMO	8.4%	84.8	86.7	16.4%	87.1	89.3
Commercial	-	-	-	33.3%	74.5	83.3
CHAMPUS	25.0%	50.0	87.5	7.1%	100.0	91.7
Blue Cross	0.0%	-	93.2	30.2%	83.2	90.9

Although the above analysis was inconclusive, it did reveal that Medicaid patients, who tend to report lower evaluations of care, are more likely to be admitted through the ED in Rhode Island (80.3%) than in the nation as a whole (65.4%).

4. Admission Question Level Drill Down

The final step in our investigation of understanding admission issues in Rhode Island was to determine which aspects of the admission process were problematic. Looking at the three questions in the admission section for all admission types, Table 13 shows us that patients in Rhode Island rate each of these issues lower than patients seen at hospitals in the rest of the country. Differences are most pronounced for the speed of the admission process and the rating of the pre-admission process.

Table 13: Comparison of Admission Related Items

Descriptive Statistics		
Mean	Hospital Location	
	Not Rhode Island	Rhode Island
Speed of the admission process	81.03	76.75
Courtesy of the admission personnel	88.21	87.50
Rating of the pre-admission process (if any)	83.57	80.88

However, this pattern is not consistent for both patients admitted through the emergency department and those not admitted through the emergency department (see table 14). Patients in Rhode Island have significantly lower ratings of their experience with admission issues when admitted through the ED. In contrast, Rhode Island patients not admitted through the Emergency Department evaluate their care quite similarly, or slightly higher than do patients in other states.

Table 14: Comparison of Admission Related Items by Admission Type

Descriptive Statistics			
Mean		Hospital Location	
ED Admit		Not Rhode Island	Rhode Island
Yes	Speed of the admission process	76.06	70.51
	Courtesy of the admission personnel	86.24	85.29
	Rating of the pre-admission process (if any)	79.76	75.90
No	Speed of the admission process	85.50	85.70
	Courtesy of the admission personnel	90.06	90.71
	Rating of the pre-admission process (if any)	86.34	86.28

Discussion

The purpose of this document was to summarize the activities surrounding the use and interpretation of data from the 2003 public report of patient satisfaction data. The Hospital Measures subgroup investigated the possibility of reporting data based upon patients' race and ethnic background and along the way investigated the process by which race and ethnicity data are collected. On a broader scope, the department of health and the Rhode Island Hospital Association led the investigation of issues surrounding the admission process and emergency care in an effort to identify ways to improve the Rhode Island patient's experience in these areas.

Throughout the process, results from each step were presented to the Rhode Island Hospital Measures and Steering Committees. These presentations prompted collaborative discussions that have been the stamp of success for the Health Care Quality Program. Collaborative efforts within the Steering Committee meetings resulted in best practice knowledge sharing regarding improvement of the admission process through the emergency department and other broad efforts to improve care.

Evaluations of the research process during the Measures Committee meetings resulted in a number of suggestions for improvement. For example, discussions during these meetings regarding the need for increased accuracy in eliciting race and ethnicity data from patients during their registration process resulted in Memorial hospital being identified as having low error rates for the collection of race and ethnicity. Memorial described their scripted process for obtaining this information from patients and subsequently shared this best practice with the group. Further, a review of Best Practices identified in the Commonwealth's report on collecting this information was conducted to help inform future methods of obtaining race information.

The process of discussion and focus on improvement for the patient satisfaction data has supported hospitals' ongoing efforts to monitor and act on their quarterly results for patient satisfaction data. To that end, it is important to note that patient satisfaction improvement efforts in Rhode Island is continuous and contact has been initiated with those facilities identified as top performers in the normative group, to see if those facilities would share what they have done to improve their satisfaction ratings. Although the Rhode Island hospitals have not been able to communicate with them directly before the writing of this report, it is actively being pursued for future benefits to Rhode Island patients.

APPENDIX I:

Best Practices for Improving the Patient's Experience with the Admission Process

Best Practices were submitted for this report by the following Rhode Island Hospitals:

- *Butler Hospital*
- *Kent County Memorial Hospital*
- *Landmark Medical Center*
- *Memorial Hospital of Rhode Island*
- *The Miriam Hospital*
- *Newport Hospital*
- *Our Lady of Fatima Hospital*
- *Rehabilitation Hospital of Rhode Island*
- *Rhode Island Hospital*
- *Roger Williams Medical Center*
- *South County Hospital*
- *The Westerly Hospital*
- *Women and Infants Hospital*

1. Submitted by Butler Hospital:

When patients are admitted to Butler Hospital, the process includes an interview with a clinician of approximately 45 minutes and an interview with a physician of approximately 30 minutes. Prior to admission, the patient's insurance company has to provide authorization for the admission and this process can take 60 minutes or more. If everything runs smoothly and the patient can be seen immediately, the process can take, at a minimum, more than two hours. As we have reviewed patient comments, it is interesting to note that many patients feel that any wait is too long and have noted that a wait of two to three hours is too much even if a portion of that time was involved in meeting with a clinician or physician.

We have implemented some enhancements that do not reduce the time from arrival in Patient Assessment Services (PAS) to admission to the unit but are aimed at providing a more customer friendly environment.

1. Amenities – Baskets of candy, cookies, and fruit as well as beverages are available in the waiting room. In addition, hot meals and sandwiches are available for people who want or need a more substantial meal.
2. Staff Scheduling – We reviewed admissions times and rearranged staff schedules to schedule more staff at peak admission times.
3. Intake Liaison – A new position was created to be accessible to patients and families in the waiting room who have questions or concerns and to apprise patients of the status of their admission.
4. Courtesy Training of Staff – Training for staff to increase ability to interact with staff in a more patient- centered way.

We are planning to add additional physician hours to increase the physician coverage during peak times in PAS (to start July 1, 2004).

We have analyzed wait time data and have discovered that for some patients the time between when the admission is completed and the time when they are escorted to the unit is significant. We are currently looking at ways to improve this process.

Another aspect of the process which affects perception of wait time is the amount of time that the patient may have waited in another emergency room awaiting transfer to Butler. Patients who have had this experience also often comment on the redundancy of the data collection. Electronic records and standard evaluation forms, while not yet a reality, will have a positive effect on wait time making it easier to share information across facilities.

2. Submitted by Kent County Memorial Hospital:

Kent Hospital has identified improving the admission process for patients admitted through the Emergency Department as a hospital-wide priority, and convened an interdisciplinary team in May 2003 to analyze this process. The Team utilized a failure modes and effects analysis approach to identify three critical points in the process: obtaining the admission order, obtaining the bed assignment, and transferring the patient from the ED to the patient care unit. Improvement strategies have been targeted to maximizing existing bed capacity and providing mechanisms to manage higher-than-usual demand for inpatient beds. The Team believes that improving these processes will result in improved patient satisfaction.

Strategies include:

- Installation of a computerized bed management and transport tracking system, with electronic “bed boards” present in the ED, Admitting, and all inpatient units to give staff real-time information about bed availability.
- Earlier identification of patients likely to be admitted by the ED physician, and notification to the Testing and Admitting Center to begin the bed assignment process.
- Earlier identification of discharge beds awaiting cleaning by implementing an ambulance driver “check-out” process for patients discharged via ambulance, and by continual monitoring for new discharge beds by Environmental Services staff assigned to the patient care units.
- Faxing report to the patient care units when a nurse is not physically available to take a verbal report.
- Revised bed assignment process to give higher priority to ED patients waiting for a bed as opposed to same-day surgical patients who will not need to move to a bed until later in the day.
- Assignment of staff to act as “admission” and “discharge” nurses so patients are not waiting for staff to complete other tasks before they can be admitted/discharged.
- Creation of an admission “lounge” on an inpatient unit so patients can be moved out of the ED while waiting for their bed to become available. Beds in the ambulatory surgery area are also used in the afternoon for this purpose.
- Implementation of a “Family Liaison” program staffed by volunteers seven days a week, ten hours a day. The Liaison keeps the family informed about the status and treatment of the patient in the ED.

3. Submitted by Landmark Medical Center:

In an effort to improve patient satisfaction regarding ED Waits and backlogs, The Landmark Medical Center developed a program to respond to improving access to emergency department care.

InstaCare at Landmark is a new innovative program designed to reduce wait times by utilizing a customer oriented team approach to emergency services and patient satisfaction. With an average waiting time of 30 minutes this system provides an unmatched convenience to patients in our region.

InstaCare is available every day between the hours of 9am to 11pm. Based on the severity of the injury or illness, patients will be directed to the appropriate care giver, a physician, nurse practitioner or other medical provider. Registration occurs at the bedside or after treatment depending on the condition.

Not only has this new model increased our number of patient visits per day, it has also decreased waiting times overall with a resultant increase in patient satisfaction.

4. Submitted by Memorial Hospital of Rhode Island:

Memorial Hospital of Rhode Island has taken the following actions, targeted in the ED, to improve patient satisfaction.

1. Changed the staffing pattern in Fast Track to decrease wait time.
2. Improvements in communication among ED caregivers
 - a. Attending physicians, residents, and the charge nurse review the status of and plan of care for all patients in the ED six times per day.
 - b. Implemented change of shift walking rounds.
 - c. Implemented the use of color-coded charts to match triage priority.
3. Improvements in communication between the ED and in-patient units
 - a. The evening supervisor participates in ED rounds and provides information regarding bed availability.
 - b. Written report is provided to the floor at the time of transfer from ED to unit.
4. Patient/ family education materials regarding ED processes provided in English, Spanish and Portuguese. This manages expectations by explaining the triage process and the reason some people may wait longer than others.

5. Submitted by The Miriam Hospital:

We have made many changes in our efforts. We have implemented the use of scripting, from explaining why we are closing the curtain "I am closing this for your privacy", to explaining the potential length of time before being seen by a physician. There is a volunteer for over eight hours to help facilitate pt. information to families, and there is a security guard present for both actual security and for the appearance for security for the patients. We have mugs with cookies and drinks available for patients who are staying overnight, or an excessive amount of time, which are imprinted with a saying to relay that we care about their situation. Finally, we have worked at opening the overflow/annex to different times to accommodate the largest amount of fast-track patients, therefore cutting down on wait time.

A few other changes have been implemented as well:

1) The overall implementation of our new Pre-Arrival Services program is having a positive effect on patient flow and reducing bottlenecks. Just by virtue of a "pre-registration" occurring before patient arrival, and at times discussion of financial expectations is preparing our patients ahead of time. When they arrive, the Admitting staff does a final verification check, obtains signatures, collects amount due, and is able to answer any additional insurance/financial questions. As we work to full implementation of the program, we expect to continue to impact patient satisfaction positively.

2) Meeting/Greeting patients in Admitting. We changed the process from a "receptionist check-in". Patients arrive and take a number (for confidentiality) in the Waiting Room. The Patient Registration Rep goes out into the waiting room to meet and greet the patient, and escort them into

the Interview Room. When interview completed, the patient is directed or escorted(if needed) on to the next area. This may seem like a small thing, but I think that the personal touch, with interaction in a positive way in the waiting room, is influencing patients positively, helping them feel more secure, etc.

3) In early April we conducted a Customer Service sessions with admitting/registration staff. We worked with OELS to have it be very patient-registration specific, with role-playing, etc. Staff enjoyed it, and seemed to get a lot out of it. I plan to have a follow up of some sort quarterly, for all staff, to keep a focus on how important customer service is.

6. Submitted by Newport Hospital:

General Information

- Annual Patient admissions 6,000
- Annual ED visits 32,000
- Newport Hospital has a strategic plan that fosters vision elements supporting our goals and objectives
- Structure and environment support continual improvement
- Integration of customer service strategy with quality improvement methods and tools for all staff

The Rhode Island Statewide public reporting project bolstered our commitment to the measurement and effective utilization of patient satisfaction data.

First Public Report

- Newport had two diamonds (♦♦) in admitting process
- Multidisciplinary project team addressed registration process

Second Public Report

- Newport had two diamonds (♦♦) in admitting process
- ED admission team created to decrease the time from decision made for admission to the time they leave the dept. The team hosted a patient focus group that examined process inputs that caused dissatisfaction and the team implemented interventions.

Actions

1. Heighten staff awareness of the importance of the survey through staff review of the project, process, & tool.
2. Heightened patient awareness with Inpatient poster, flyers, and discharge follow up calls encouraging their participation in the survey process.
3. Improved communication among all parties involved in the process: particularly with staff in the ED, informing them of the survey results and developing opportunities to improve.
Example interventions were:
 - Keeping patients, family, and staff informed of ongoing activity.
 - This includes faxing report for the med/surg and pediatrics nursing staff with the goal to have patients up to unit within 1 hour.
 - Clinical directors meet daily at 11 am to discuss bed situation and develop plans for staffing and beds.
 - Communicating thoroughly with our hospitalist program creating ongoing strong relationships with hospitalists thus enabling continuity of care and facilitated movement of patients

4. Recognition and celebration of staff when results reflect their efforts... Drive Process Improvement

7. Submitted by Our Lady of Fatima Hospital:

St. Joseph Health Services has implemented numerous operational changes within the organization. Changes include newly hired staff as the Chief Nurse Executive, Medical Director of the Emergency Department, Clinical Director of Critical Care/Emergency Department Services, and Clinical Manager of the Emergency Department.

An Interdisciplinary Team is in place to concurrently review patient flow through the Emergency Department. Oversight of this Team is the responsibility of the Chief Operating Officer.

The Clinical Manager on each patient care unit meets with each new admission and communicates our Customer Service Philosophy.

In addition, the Director of Critical Care and the Director of Medical/Surgical Services periodically conduct their own patient visits utilizing a similar format as used by the Clinical Manager, giving the patient/family their business card and letting the patient/family know they are also available for anything the patient/family may need.

System Enhancements in the Emergency Department include the following:

Adopting a new approach to patient flow through the Emergency Department called Patient First. The revised process is designed to improve throughput and decrease turnaround times for immediate evaluation of all patients, efficient use of limited beds and space, and efficient use of provider time and skills. In addition, plans for the future include implementation of Patient Customer Assistants.

Other planned enhancements are in the areas of Triage/Staging and Registration. Examples are performing bedside registration for patients taken to the main Emergency Department and performing exit registration for patients discharged from the Triage or Staging Areas.

Also, St. Joseph Health Services has embarked upon a renewed effort to improve customer service through a hospital-wide Customer Service initiative. A Customer Service Steering Committee, with the Chief Executive Officer being the Administrative Lead for the initiative, oversees the initiative. Customer Service Action Teams, which include front line staff and management, are in place.

8. Submitted by Rehabilitation Hospital of Rhode Island:

One of the issues that was identified in our Patient Satisfaction Surveys was problem resolution. A program was implemented at The Rehabilitation Hospital of Rhode Island to improve Patient Satisfaction through a process improvement and education plan. The basic premise of the program was to address issues or problematic patient concerns before discharge in order to provide corrective action while the patient was still hospitalized.

To do so, the CNO and other senior leaders made rounds of the patient units and visited each new admission. Patients and families were informed about what to do in the event of a problem. Bedside cards were left with phone numbers on how to reach a manager who could address their issues. Rounds were also conducted later in the hospital stay in order to follow up on any problems.

The nursing staff was involved in educational programs regarding customer service expectations. Physicians were also brought into the loop by meeting with them to discuss results and patient expectations. Patient Satisfaction and Customer Service principles were incorporated into the hospital orientation and a list of Core Values was developed to address expectations of this program to improve the patient experience. Staff members were asked to sign an acknowledgement of their agreement with and good faith promise to improve customer service and patient satisfaction. In the end, all hospital staff members were educated about their accountability to make improvements in satisfaction a part of their job.

9. Submitted by Rhode Island Hospital:

Rhode Island Hospital is keenly aware of its aging Davol Emergency Department. Patient volume has exceeded capacity resulting in cubicles in the emergency care area being reduced from 100 square feet to 50 square feet, below the American Institute of Architects (AIA) standard at the time. Inadequate treatment areas have resulted in limited space for practitioners to deliver care efficiently, diminished patient/family privacy, and delays in the admission process. The inability to expand/improve technology and work processes has resulted in a decline of patient, employee, and physician satisfaction.

Rhode Island Hospital is pleased to report its progress of the new redesigned state of the art Emergency Department. Construction is well underway to increase the size of the Emergency Department from 21,710 square feet to 69,710 square feet. The additional space will increase the total number of treatment areas to 72. The new design will meet or exceed the guidelines for construction and equipment of hospital and medical facilities developed by the AIA, provide a separate defined entrance for urgent care, increase the size of the trauma center, designate beds for chest pain patients, and provide adequate space for needed radiology equipment. In addition, the triage area will be more appropriately sized and redesigned to ensure patient privacy and confidentiality, and to improve timeliness of the registration process. In anticipation and planning for the new Emergency Department, the following activities are in progress:

1. Infrastructure Redesign

- ED process flow team for the new Emergency Dept. - led by our CEO, Chief Nursing Officer, and Vice President of Support Services.
- Computerized ED tracking system – early assignment of beds for admitted patients.
- Electronic transport tracking system for admitted patients.
- Early discharge process team – major focus is improving workflow of observation patients, organizing and overcoming barriers of testing areas.

2. Additional Healthcare Workers/Beds
 - In FY2005, approximately 50 additional support staff, nurses and diagnostic imaging staff will be added including greeters to assist families.
 - An additional 9 psychiatric inpatient beds were opened in 2004 to support the demand and to expedite transfer of psychiatric patients out of the Emergency Department.
3. Clinical Care Improvements
 - *Med teams* training was completed in the ED. *Med teams* is a formal process of team training to improve communication and patient safety among the multidisciplinary clinical team.
 - New Cardiac Service Line design with a newly appointed Medical and Administrative Director of Cardiology.
 - Medical admitting resident whose only assignment is in the ED.
 - Evaluation of expanded dental service and residency program to meet increased patient demands.
 - Trauma service expanded with 3 additional critical care beds.
4. Visitor Accommodations/Patient Comforts Measures
 - Restaurant and café conveniently located in new area for family and visitors.

Rhode Island Hospital expects to open the new facility in February 2005 with two levels of hospital visitor and patient parking totaling 250 spaces. The additional spaces will be located under the Emergency Department with convenient access. Once the new building is completed, an attached new parking deck will be constructed to accommodate 250 additional spaces. The new parking deck completion date is late 2005.

10. Submitted by Roger Williams Medical Center:

Developed scripts to assist staff with communication with patients and the families in common situations that occur in the Emergency Department, for example, triage nurse disposition to home, admitting, staff entering a patient's ED room. Also developed responses for staff to use with frequently asked questions like "Why did they go before me?"; "Why aren't you seeing me immediately like my primary doctor said you would?". Service Recovery Program including scripts for estimated waiting times and reiterate that patients are waiting for bed appropriate to their medical needs. Bedside registration to be piloted in ED starting July 15, 2004 in an effort to speed up waiting time to be seen. Volunteers to serve as patient family liaison to keep patients and families informed. 100% of all ED patients are surveyed. Day chemo unit was renovated to serve as holdover unit for monitored patients waiting to be admitted to deal with overcrowding issues. Temporary compensation package and Incentive Program implemented to encourage nurses to staff during peak times. "All Hands" program implemented to deal with peak times. All non-clinical tasks, cleaning stretchers, family liaison, transporting specimens can be done by volunteers from other departments. All patients who left without being seen and Against Medical Advice are tracked and reviewed. ED Management Team identified those patients as one of the top priority focus for 2004. Renovations planned for Emergency Department to provide more space and efficient environment. Improved use of translator services.

11. Submitted by South County Hospital:

In addressing patient satisfaction with the admission process, South County Hospital decided to focus on emergency department (ED) access as a high percentage of patients admitted to the hospital come through our ED. We are also focusing again, as we have in the past, on our pre-admission testing process for elective surgical admissions. Currently we have a multidisciplinary team – “Get 'Em Up” Team – working on the processes around ED admissions. We have identified opportunities for improvement in areas such as communication from department to department; admitting department to ED assigning a bed; inpatient bed control letting Admitting know about bed availability; ED nursing giving report to inpatient unit; and communication processes with the patient regarding waits and expectations. We have implemented some solutions to these and many other issues related to this. Examples of specific improvements are:

- We have set a standard for staff to return to see each patient at least every 20 minutes.
- We have developed scripting for the staff to use in the ED to communicate clear, consistent information to patients about bed placement.
- We have worked with housekeeping on improving the timeliness of cleaning rooms and communication to the admitting department that the bed is clean and ready for occupancy.
- We have improved the method for alerting and communicating with housekeeping.

The entire admission process is a complicated process when you really break it down. We have systematically worked on each step of the process to gain improvement. We will continue our efforts as this is a work in progress.

12. Submitted by The Westerly Hospital:

Measuring and improving patient satisfaction has always been a priority at the Westerly Hospital. Patient satisfaction results are shared with staff and we have a Customer Service Team that reviews results. Staff at all levels of the hospital and on all shifts are complimented for improvement efforts and results. Improving the care experience in the Emergency Department (ED) was also identified as a priority. In an effort to improve, we implemented bedside registration in the ED. Patient and staff feedback regarding this process has been positive. To reduce wait times in the ED, we have added more health care practitioners and implemented a fast track program. As part of our ongoing efforts, we have also identified opportunities to improve turn around times in the ED for laboratory tests and radiology procedures. We are currently focusing on these issues and our monitoring efforts are showing improvement.

13. Submitted by Women and Infants Hospital:

One of the greatest challenges in facilitating this process is our ability to collect time data on the phases of the process. We do not currently have any electronic systems for tracking patients. We have made several attempts to have staff participate in manual collection of the data, but we have never been able to accurately determine the true length of our wait times. Therefore, we focused our efforts on managing the wait time experience and on improving areas that were of the highest priority based on staff observation.

The Triage Unit is where the majority of our obstetrical patients are seen prior to admission. They also see a large volume of outpatients. The major issues that have been reviewed to date are managing wait time, improving communication, and improving the patient flow through the Triage Unit. We have an Admission Process Team assigned to look at these issues. The team includes

nursing staff from the Triage Unit, Radiology, Marketing Communications, Administration, a physician, and a nurse midwife. Additional patient support departments attend on an ad hoc basis.

Managing the Wait Time Experience:

Realizing that there will always be some amount of waiting time to be seen in Triage, the team focused on ways to manage that time more effectively and improve the experience for patients and their families. The team worked with Marketing Communications to develop a brochure and posters designed to explain the triage process for patients and to help set service expectations. Many patients become upset when they see another patient taken in before them when they arrived before that other patient. The brochure explains why this may be the case. This process is also verbalized by the staff who have been trained in scripting. The hospital also has an established Service Recovery program which all staff can use when they interact with dissatisfied patients or family members.

To further assist with this communication, the hospital also extended the Greeter hours in the Triage area. Volume data was examined and it was noted that the admissions begin to peak in the late afternoon hours. A Greeter is posted at the Triage entrance from 10A- 5P most days. The Greeter also alleviates the number of visitors going to the nurses' desk for assistance, and therefore decreases the number of interruptions for the nurses when they are trying to process patients. The Triage entrance is the most frequently used entrance for the hospital, and visitors often come in seeking the location of various departments and patient information.

The Admissions Process Team solicited funds from the Women & Infants Hospital Auxiliary to purchase televisions and pagers for the Triage Unit. Televisions were installed in each exam room so that patients waiting for test results or waiting to be seen by a provider are able to pass the time watching television. Restaurant-style pagers are now given to patients waiting to be seen. This allows the patient to leave the waiting area to visit the cafeteria, gift shop, main lobby and even to step a short distance outside without fear that they will miss being called by the nurse.

Improved Communication:

The team created a new form for the Triage Unit. This form has improved communication and was enthusiastically accepted by the staff. Previously, physician's would call the Triage nurses' station in the patient care area and inform them that a patient was being sent there for treatment and also to give a list of orders. Prior to the development of the new form, a few notes would be recorded on a clip board, but the information was often not shared with the nurse at the front desk. The patient would arrive at the front desk and state that their doctor had called, but the nurse would not be aware of the orders. This often resulted in unnecessary calls to physician offices.

Now, the new form is completed during the phone call from the physician, and then it is transferred out to the front desk so the nurse is aware of the orders and diagnosis when the patient arrives. Lab tests can be completed as soon as the patient is seen by the nurse at the front desk and sent for processing while the patient is waiting to be called into a room in the patient care area.

The Labor/Delivery/Recovery Room staff now share with both the Triage and Registration staff a patient listing of those patients who are scheduled for induction. Often these patients can then be sent directly to the LDR rather than going through admission in Triage.

Patient Flow Improvements:

A separate team was formed to look at patients receiving Rh-immune globulin (Rhogam) injections. Previously these patients would register to be seen in Triage. Since they were not emergent cases, these patients often waited a long period of time to receive an injection. The Rhogam Team worked with physician offices to reduce the number of patients coming to Triage for this service by helping

the practices set up the service in their offices. The team also worked to streamline the process to decrease the wait time for those patients who still come to the hospital for the injections. They have reduced the number of patients coming to Triage for injections by at least 26% and have reduced the wait time for those who do receive injections.

In June of 2003, a new attending was hired for the Triage area to improve the physician coverage. The department also started assigning a charge nurse whose job is to manage the patient flow in the unit. The nurse manager of the Triage unit also serves as the Bed Coordinator for the hospital and tries to expedite the transfer of patients out of Triage.

The team is currently working with Radiology to decrease the wait time for results. They are in the process of setting up a room in Triage designated for ultrasound exams to eliminate the need to transfer many patients to the Radiology Department.